

# Signature Page

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MICHAEL HIXON

**Organization**

OG AND E

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S20220325092144-F11-R2021

## 2021 Emissions Inventory Report

OG AND E (330)

### Emissions Summary for RIVER VALLEY GENERATING STATION (11)

#### CRITERIA AIR POLLUTANT (CAP) EMISSIONS TOTALS

Pollutant Code/CAS #	Pollutant Name	Total Emissions (tons)*
CO	Carbon Monoxide	996.676
NOX	Nitrogen Oxides (NOx) expressed as NO2	1,519.843
PM10-PRI	PM10 - Primary (Filterable + Condensable)	142.711
PM25-PRI	PM2.5 - Primary (Filterable + Condensable)	82.869
SO2	Sulfur Oxides (SOx) expressed as SO2	636.102
VOC	Volatile Organic Compounds (VOCs)	2.905

#### HAZARDOUS AIR POLLUTANT (HAP) and/or OTHER POLLUTANT EMISSIONS TOTALS

Pollutant Code/CAS #	Pollutant Name	Is VOC/PM?	Total Emissions (tons)*
121142	2,4-Dinitrotoluene (HAP)	VOC	0.022
75070	Acetaldehyde (HAP-TOX)	VOC	0.025
98862	Acetophenone (HAP)	VOC	0.016
107028	Acrolein (HAP)	VOC	0.029
107131	Acrylonitrile (HAP-TOX)	VOC	0.09
71432	Benzene (including benzene from gasoline) (HAP-TOX)	VOC	0.017
92875	Benzidine (HAP)	VOC	0.023
100447	Benzyl chloride (HAP)	VOC	0.016
117817	Bis(2-ethylhexyl)phthalate (DEHP) (HAP)	VOC	0.02
75150	Carbon disulfide (HAP)	VOC	0.014
132649	Dibenzofuran (HAP)	VOC	0.023
84742	Dibutylphthalate (HAP)	VOC	0.006
131113	Dimethyl phthalate (HAP)	VOC	0.007
106934	Ethylene dibromide (Dibromoethane) (HAP)	VOC	0.004
50000	Formaldehyde (HAP-TOX)	VOC	0.015
110543	Hexane (HAP)	VOC	0.018
7647010	Hydrochloric acid (HAP)	PM	1.765
7664393	Hydrogen fluoride (Hydrofluoric acid) (HAP)	PM	0.47
7439976	Mercury (HAP-TOX)	PM	0.007

Pollutant Code/CAS #	Pollutant Name	Is VOC/PM?	Total Emissions (tons)*
108101	Methyl isobutyl ketone (Hexone) (HAP)	VOC	0.073
75092	Methylene chloride (Dichloromethane) (HAP-TOX)	-	0.156
108952	Phenol (HAP)	VOC	0.016
123386	Propionaldehyde (HAP)	VOC	0.041
7664939	Sulfuric acid (including acid mist expressed as H2SO4) (OTH)	PM	0.073
108883	Toluene (HAP-TOX)	VOC	0.014
*Rounded to 3 digits past the decimal point. Note that where rounding results in 0, <.001 is indicated.			

**2021 Emissions Inventory Report**  
**OG AND E (330)**  
**RIVER VALLEY GENERATING STATION (11)**

**COMPANY**

**Mailing Address:** PO BOX 321 MC610  
 OKLAHOMA CITY, OK 73102-0321

**Contact Phone:** (405) 553-3000

**Contact FAX:** (553) 553-3689

**FACILITY**

**Facility Identifier:** 11 **Facility Name:** RIVER VALLEY GENERATING STATION

**Status:** OP - Operating **Status Year:**

**NAICS:** 221112 (Primary) - Fossil Fuel Electric Power Generation

**Comments:**

**FACILITY - ADDRESS**

**Location Address:** 3 MILES E OF HWY 31/59 JCT  
 PANAMA, OK 74951

**FACILITY - LOCATION**

**Latitude (decimal degrees):** 35.19506 **Longitude (decimal degrees):** -94.64569

**Collection Method:** 020 - interpolation-satellite **Data Collection Date:** 09/22/2009

**Geographic Reference Point:** **Geodetic Reference System:** 003 - World Geodetic System of 1984

**FACILITY - ADDITIONAL INFORMATION**

Field Name	Field Value
Oil & Gas Facility Category	Not Applicable
Permit Number(s)	86-045-C PSD,2016-0355-TVR2
SIC Number	4911
TRI Identifier (ID)	74951SSH DY3MILE

RELEASE POINTS					
ID	Type	Description	Status	Details	Location
8315	Vertical	Unit 1A, 1B, 2A, 2B Common Boiler Stack	OP in 2007	Height: 350.0 FEET, Shape: Circular, Diameter: 17.0 FEET, Temperature: 350.0 F, Flow Rate: 800,016.0 ACFM, Velocity: 58.74 FPS	Lat/Long: (35.19281, -94.64691)
8319	Fugitive Area	Railcar Unloading	TS in 2002	Fugitive Height: 15.0 FEET, Fugitive Width: 1,268.0 FEET, Fugitive Length: 1,268.0 FEET, Fugitive Angle: 0°	Uses Facility Site Location
8320	Fugitive Area	Vehicle traffic	OP in 2002	Fugitive Height: 11.0 FEET, Fugitive Width: 107.0 FEET, Fugitive Length: 107.0 FEET, Fugitive Angle: 0°	Uses Facility Site Location
8321	Fugitive Area	Coal transfer	OP in 2002	Fugitive Height: 15.0 FEET, Fugitive Width: 1,268.0 FEET, Fugitive Length: 1,268.0 FEET, Fugitive Angle: 0°	Uses Facility Site Location
8322	Fugitive Area	Limestone transfer	OP in 2007	Fugitive Height: 15.0 FEET, Fugitive Width: 990.0 FEET, Fugitive Length: 990.0 FEET, Fugitive Angle: 0°	Uses Facility Site Location
8323	Fugitive Area	Ash handling	OP in 2007	Fugitive Height: 15.0 FEET, Fugitive Width: 252.0 FEET, Fugitive Length: 252.0 FEET, Fugitive Angle: 0°	Uses Facility Site Location
8325	Fugitive Area	Storage piles for ash and coal	OP in 2002	Fugitive Height: 15.0 FEET, Fugitive Width: 1,341.0 FEET, Fugitive Length: 1,341.0 FEET, Fugitive Angle: 0°	Uses Facility Site Location
12792	Vertical	CO2 Plant Stack	TS in 2002	Height: 104.0 FEET, Shape: Circular, Diameter: 2.5 FEET, Temperature: 212.0 F, Flow Rate: 17,354.0 ACFM, Velocity: 58.92 FPS	Uses Facility Site Location
	<b>Comment:</b> CO2 Plant didn't operate in 2020				
35895	Vertical	Cooling Towers EUG-10	OP in 2006	Height: 60.0 FEET, Shape: Circular, Diameter: 52.0 FEET, Temperature: 78.0 F, Flow Rate: 6,371,150.0 ACFM, Velocity: 50.0 FPS	Uses Facility Site Location
160625	Vertical	ENG-1 1,180-hp Cummins KTA-38-GI Emergency Diesel Power Generator	OP in 2017	Height: 3.0 FEET, Shape: Circular, Diameter: 0.5 FEET, Temperature: 900.0 F, Flow Rate: 1,592.0 ACFM, Velocity: 135.0 FPS	Uses Facility Site Location
160717	Vertical	ENG-2 890-hp Caterpillar 3412 Emergency Boiler Feedwater Pump	OP in 2017	Height: 3.0 FEET, Shape: Circular, Diameter: 0.5 FEET, Temperature: 900.0 F, Flow Rate: 1,592.0 ACFM, Velocity: 135.13 FPS	Uses Facility Site Location
160730	Vertical	ENG-3 420-hp Caterpillar 3406B DI Diesel Firewater Pump	OP in 2017	Height: 4.0 FEET, Shape: Circular, Diameter: 0.5 FEET, Temperature: 900.0 F, Flow Rate: 1,592.0 ACFM, Velocity: 135.1 FPS	Uses Facility Site Location

CONTROL DEVICES				
ID	Description	Status	Control Measure	Controlled Pollutants
122037	Low Excess Air Firing Primary 100 99	OP	29 - Low Excess Air Firing	NOX-Nitrogen Oxides (NOx) expressed as NO2: 99.0%
122038	Dry Limestone Injection Primary 100 92.2	OP	41 - Dry Limestone Injection	SO2-Sulfur Oxides (SOx) expressed as SO2: 92.2%
122039	Other Control Device Primary 100 50	OP	99 - Other Control Device	PM10-PRI-PM10 - Primary (Filterable + Condensable): 50.0%
122040	Other Control Device Primary 100 95	OP	99 - Other Control Device	PM10-PRI-PM10 - Primary (Filterable + Condensable): 95.0%
122041	Fabric Filter / Baghouse Primary 100 98	OP	127 - Fabric Filter / Baghouse	PM10-PRI-PM10 - Primary (Filterable + Condensable): 98.0%
122042	Fabric Filter / Baghouse Primary 100 99	OP	127 - Fabric Filter / Baghouse	7439921-Lead: 99.0%, PM10-PRI-PM10 - Primary (Filterable + Condensable): 99.0%, PM25-PRI-PM2.5 - Primary (Filterable + Condensable): 99.0%, 7440473-Chromium: 99.0%, OKDEQ6216-Fluorides (non-HAP): 99.0%, 7439965-Manganese: 99.0%, 7440020-Nickel: 99.0%
122043	Fabric Filter / Baghouse Secondary 100 99	OP	127 - Fabric Filter / Baghouse	SO2-Sulfur Oxides (SOx) expressed as SO2: 99.0%
122044	Dust Suppression Primary 100 50	OP	217 - Dust Suppression	PM10-PRI-PM10 - Primary (Filterable + Condensable): 50.0%

EMISSION UNITS				
ID	Type	Description	Status	Details
8315	100 - Boiler	Boiler 1A B-01A EUG-2	OP in 2002	Operation Start : , Design Capacity: 901.27 E6BTU/HR
8316	100 - Boiler	Boiler 1B B-02-01B EUG-2	OP in 2002	Operation Start : , Design Capacity: 857.84 E6BTU/HR
8317	100 - Boiler	Boiler 2A B-02-02A EUG-2	OP in 2002	Operation Start : , Design Capacity: 872.95 E6BTU/HR
8318	100 - Boiler	Boiler 2B B-02-02B EUG-2	OP in 2002	Operation Start : , Design Capacity: 881.07 E6BTU/HR
8319	770 - Transfer Point	Railcar Unloading	TS in 2011	Operation Start : , Design Capacity:
8320	300 - Open Air Fugitive Source	Vehicle Traffic EUG-7	OP in 2002	Operation Start : , Design Capacity:
8321	770 - Transfer Point	Coal handling EUG-6	OP in 2002	Operation Start : , Design Capacity:
8322	760 - Conveyor	Limestone handling EUG-5	OP in 2002	Operation Start : , Design Capacity:
8323	760 - Conveyor	Ash handling EUG-4	OP in 2002	Operation Start : , Design Capacity:
8325	785 - Open Storage Pile	Storage piles EUG-8	OP in 2002	Operation Start : , Design Capacity:
12776	690 - Other process equipment	CO2 Plant EUG-3	TS in 2002	Operation Start : , Design Capacity:
	<b>Comment:</b> CO2 plant didn't operate in 2020			
36186	680 - Cooling Tower	Cooling Towers EUG-10	OP in 2006	Operation Start : , Design Capacity:
161174	160 - Reciprocating IC Engine	ENG-1 1,180-hp Cummins KTA-38-G1 Emergency Diesel Power Generator	OP in 2017	Operation Start : , Design Capacity: 1,180.0 HP
161271	160 - Reciprocating IC Engine	ENG-2 890-hp Caterpillar 3412 Emergency Boiler Feedwater Pump	OP in 2017	Operation Start : , Design Capacity: 890.0 HP
161286	160 - Reciprocating IC Engine	ENG-3 420-hp Caterpillar 3406B DI Diesel Firewater Pump	OP in 2017	Operation Start : , Design Capacity: 490.0 HP

UNIT PROCESSES					
Emission Unit ID	Unit Process ID	SCC	Description	Status	Details
8315 Boiler 1A B-01A EUG-2	39171	10100238	Subbituminous Coal - Boiler, Atmospheric Fluidized Bed Combustion: Circulating Bed	OP	<b>Control Approach</b> Controlled?: Yes Description: Fabric Filter / Baghouse and other measures <u>Control Devices:</u> 122037-Low Excess Air Firing Primary 100 99, Seq: 1, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% 122038-Dry Limestone Injection Primary 100 92.2, Seq: 2, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% 122042-Fabric Filter / Baghouse Primary 100 99, Seq: 3, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% 122043-Fabric Filter / Baghouse Secondary 100 99, Seq: 4, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% <b>Release Point Apportionment:</b> 8315 - Unit 1A, 1B, 2A, 2B Common Boiler Stack: 100.0%
8315 Boiler 1A B-01A EUG-2	39172	10100601	Natural Gas - Boiler, >= 100 Million BTU/hr	OP	<b>Control Approach</b> Controlled?: Yes Description: Fabric Filter / Baghouse and other measures <u>Control Devices:</u> 122037-Low Excess Air Firing Primary 100 99, Seq: 1, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% 122038-Dry Limestone Injection Primary 100 92.2, Seq: 2, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% 122042-Fabric Filter / Baghouse Primary 100 99, Seq: 3, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% 122043-Fabric Filter / Baghouse Secondary 100 99, Seq: 4, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% <b>Release Point Apportionment:</b> 8315 - Unit 1A, 1B, 2A, 2B Common Boiler Stack: 100.0%
8316 Boiler 1B B-02-01B EUG-2	39173	10100238	Subbituminous Coal - Boiler, Atmospheric Fluidized Bed Combustion: Circulating Bed	OP	<b>Control Approach</b> Controlled?: Yes Description: Fabric Filter / Baghouse and other measures <u>Control Devices:</u> 122037-Low Excess Air Firing Primary 100 99, Seq: 1, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% 122038-Dry Limestone Injection Primary 100 92.2, Seq: 2, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% 122042-Fabric Filter / Baghouse Primary 100 99, Seq: 3, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% 122043-Fabric Filter / Baghouse Secondary 100 99, Seq: 4, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% <b>Release Point Apportionment:</b> 8315 - Unit 1A, 1B, 2A, 2B Common Boiler Stack: 100.0%



Emission Unit ID	Unit Process ID	SCC	Description	Status	Details
8316 Boiler 1B B-02-01B EUG-2	39174	10100601	Natural Gas - Boiler, >= 100 Million BTU/hr	OP	<b>Control Approach</b> Controlled?: Yes Description: Fabric Filter / Baghouse and other measures <u>Control Devices:</u> 122037-Low Excess Air Firing Primary 100 99, Seq: 1, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% 122038-Dry Limestone Injection Primary 100 92.2, Seq: 2, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% 122042-Fabric Filter / Baghouse Primary 100 99, Seq: 3, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% 122043-Fabric Filter / Baghouse Secondary 100 99, Seq: 4, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0%  <b>Release Point Apportionment:</b> 8315 - Unit 1A, 1B, 2A, 2B Common Boiler Stack: 100.0%
8317 Boiler 2A B-02-02A EUG-2	39175	10100238	Subbituminous Coal - Boiler, Atmospheric Fluidized Bed Combustion: Circulating Bed	OP	<b>Control Approach</b> Controlled?: Yes Description: Fabric Filter / Baghouse and other measures <u>Control Devices:</u> 122037-Low Excess Air Firing Primary 100 99, Seq: 1, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% 122038-Dry Limestone Injection Primary 100 92.2, Seq: 2, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% 122042-Fabric Filter / Baghouse Primary 100 99, Seq: 3, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% 122043-Fabric Filter / Baghouse Secondary 100 99, Seq: 4, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0%  <b>Release Point Apportionment:</b> 8315 - Unit 1A, 1B, 2A, 2B Common Boiler Stack: 100.0%
8317 Boiler 2A B-02-02A EUG-2	39176	10100601	Natural Gas - Boiler, >= 100 Million BTU/hr	OP	<b>Control Approach</b> Controlled?: Yes Description: Fabric Filter / Baghouse and other measures <u>Control Devices:</u> 122037-Low Excess Air Firing Primary 100 99, Seq: 1, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% 122038-Dry Limestone Injection Primary 100 92.2, Seq: 2, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% 122042-Fabric Filter / Baghouse Primary 100 99, Seq: 3, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% 122043-Fabric Filter / Baghouse Secondary 100 99, Seq: 4, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0%  <b>Release Point Apportionment:</b> 8315 - Unit 1A, 1B, 2A, 2B Common Boiler Stack: 100.0%

Emission Unit ID	Unit Process ID	SCC	Description	Status	Details
8318 Boiler 2B B-02-02B EUG-2	39177	10100238	Subbituminous Coal - Boiler, Atmospheric Fluidized Bed Combustion: Circulating Bed	OP	<b>Control Approach</b> Controlled?: Yes Description: Fabric Filter / Baghouse and other measures <u>Control Devices:</u> 122037-Low Excess Air Firing Primary 100 99, Seq: 1, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% 122038-Dry Limestone Injection Primary 100 92.2, Seq: 2, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% 122042-Fabric Filter / Baghouse Primary 100 99, Seq: 3, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% 122043-Fabric Filter / Baghouse Secondary 100 99, Seq: 4, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0%  <b>Release Point Apportionment:</b> 8315 - Unit 1A, 1B, 2A, 2B Common Boiler Stack: 100.0%
8318 Boiler 2B B-02-02B EUG-2	39178	10100601	Natural Gas - Boiler, >= 100 Million BTU/hr	OP	<b>Control Approach</b> Controlled?: Yes Description: Fabric Filter / Baghouse and other measures <u>Control Devices:</u> 122037-Low Excess Air Firing Primary 100 99, Seq: 1, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% 122038-Dry Limestone Injection Primary 100 92.2, Seq: 2, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% 122042-Fabric Filter / Baghouse Primary 100 99, Seq: 3, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% 122043-Fabric Filter / Baghouse Secondary 100 99, Seq: 4, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0%  <b>Release Point Apportionment:</b> 8315 - Unit 1A, 1B, 2A, 2B Common Boiler Stack: 100.0%
8319 Railcar Unloading	39179	30501044	Coal Mining, Cleaning, and Material Handling - Train Loading: Coal	TS in 2011	<b>Control Approach</b> Controlled?: No Description: Control approach not specified. Assumes not controlled.  <b>Release Point Apportionment:</b> 8319 - Railcar Unloading: 100.0%
8320 Vehicle Traffic EUG-7	39180	30502011	Stone Quarrying - Processing (See also 305320) - Hauling	OP	<b>Control Approach</b> Controlled?: Yes Description: Dust Suppression <u>Control Devices:</u> 122044-Dust Suppression Primary 100 50, Seq: 1, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0%  <b>Release Point Apportionment:</b> 8320 - Vehicle traffic: 100.0%

Emission Unit ID	Unit Process ID	SCC	Description	Status	Details
<b>8321</b> Coal handling EUG-6	<b>39181</b>	30501011	Coal Mining, Cleaning, and Material Handling - Coal Transfer	OP	<b>Control Approach</b> Controlled?: No Description: Control approach not specified. Assumes not controlled.  <b>Release Point Apportionment:</b> 8321 - Coal transfer: 100.0%
<b>8322</b> Limestone handling EUG-5	<b>39182</b>	30510105	Bulk Materials Conveyors - Limestone	OP	<b>Control Approach</b> Controlled?: No Description: Control approach not specified. Assumes not controlled.  <b>Release Point Apportionment:</b> 8322 - Limestone transfer: 100.0%
<b>8323</b> Ash handling EUG-4	<b>39183</b>	30510199	Bulk Materials Conveyors - Other Not Classified	OP	<b>Control Approach</b> Controlled?: Yes Description: Fabric Filter / Baghouse <u>Control Devices:</u> 122041-Fabric Filter / Baghouse Primary 100 98, Seq: 1, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0%  <b>Release Point Apportionment:</b> 8323 - Ash handling: 100.0%
<b>8325</b> Storage piles EUG-8	<b>39185</b>	30510203	Bulk Materials Storage Bins - Coal	OP	<b>Control Approach</b> Controlled?: No Description: Control approach not specified. Assumes not controlled.  <b>Release Point Apportionment:</b> 8325 - Storage piles for ash and coal: 100.0%
<b>12776</b> CO2 Plant EUG-3	<b>39186</b>	39000699	Natural Gas - General	TS in 2002	<b>Control Approach</b> Controlled?: No Description: Control approach not specified. Assumes not controlled.  <b>Release Point Apportionment:</b> 12792 - CO2 Plant Stack: 100.0%
<b>12776</b> CO2 Plant EUG-3	<b>39187</b>	39999999	Miscellaneous Industrial Processes - Other Not Classified	TS in 2002	<b>Control Approach</b> Controlled?: No Description: Control approach not specified. Assumes not controlled.  <b>Release Point Apportionment:</b> 12792 - CO2 Plant Stack: 100.0%
<b>36186</b> Cooling Towers EUG-10	<b>142967</b>	38500101	Process Cooling - Mechanical Draft	OP	<b>Control Approach</b> Controlled?: No Description: Control approach not specified. Assumes not controlled.  <b>Release Point Apportionment:</b> 35895 - Cooling Towers EUG-10: 100.0%

Emission Unit ID	Unit Process ID	SCC	Description	Status	Details
<b>161174</b> ENG-1 1,180-hp Cummins KTA-38-GI Emergency Diesel Power Generator	<b>284777</b>	20100107	Distillate Oil (Diesel) - Reciprocating: Exhaust	OP	<b>Control Approach</b> Controlled?: No Description: Control approach not specified. Assumes not controlled.  <b>Release Point Apportionment:</b> 160625 - ENG-1 1,180-hp Cummins KTA-38-GI Emergency Diesel Power Generator: 100.0%
<b>161271</b> ENG-2 890-hp Caterpillar 3412 Emergency Boiler Feedwater Pump	<b>284857</b>	20100107	Distillate Oil (Diesel) - Reciprocating: Exhaust	OP	<b>Control Approach</b> Controlled?: No Description: Control approach not specified. Assumes not controlled.  <b>Release Point Apportionment:</b> 160717 - ENG-2 890-hp Caterpillar 3412 Emergency Boiler Feedwater Pump: 100.0%
<b>161286</b> ENG-3 420-hp Caterpillar 3406B DI Diesel Firewater Pump	<b>285150</b>	20200102	Distillate Oil (Diesel) - Reciprocating	OP	<b>Control Approach</b> Controlled?: No Description: Control approach not specified. Assumes not controlled.  <b>Release Point Apportionment:</b> 160730 - ENG-3 420-hp Caterpillar 3406B DI Diesel Firewater Pump: 100.0%

PROCESS EMISSIONS				
Emission Unit ID	Unit Process ID	Throughput	Operations	
8315 Boiler 1A B-01A EUG-2	39171 Subbituminous Coal - Boiler, Atmospheric Fluidized Bed Combustion: Circulating Bed	Annual Throughput: 122,818.15 TONS (Coal) (Input)	Average Hours/Day: 20.6, Days/Week: 5.1, Weeks/Year: 30.0 Actual Hours/Year: 3,018.8 Seasonal Operations: Dec-Feb: 18.1%, Mar-May: 7.3%, Jun-Aug: 55.0%, Sep-Nov: 19.6%	
Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide	2.7711	TON - TONS	4_0 - Stack Test - US EPA Reference Method (no Control EF)	170.1706877325
Stack Test Date: 02/06/1991				
Emission Comment: 1991 Stack Test				
NOX - Nitrogen Oxides (NOx) expressed as NO2			1_0 - Continuous Emission Monitoring System (CEMS)	258.1340373
Emission Comment: Emissions are measured by the Part 75 CEMS on the common stack. To get emissions per boiler, emissions are scaled by their per boiler Part 60 emissions.				
PM10-FR - PM10 - Primary (Filterable + Condensable)	0.012	EBBTU - MILLION BTUS	4_2 - Stack Test - US EPA Reference Method (pre-Control EF)	13.199
Stack Test Date: 02/06/1991				
Overall Control Efficiency: 99.0%				
Emission Comment: 1991 Stack Test				
PM25-FR - PM2.5 - Primary (Filterable + Condensable)	0.007	EBBTU - MILLION BTUS	4_0 - Stack Test - US EPA Reference Method (no Control EF)	7.7
Stack Test Date: 02/06/1991				
Emission Comment: 1991 Stack Test				
SO2 - Sulfur Oxides (SOx) expressed as SO2			1_0 - Continuous Emission Monitoring System (CEMS)	135.2180674
Emission Comment: Emissions are measured by the Part 75 CEMS on the common stack. To get emissions per boiler, emissions are scaled by their per boiler Part 60 emissions.				
VOC - Volatile Organic Compounds (VOCs)	0.006	TON - TONS	4_0 - Stack Test - US EPA Reference Method (no Control EF)	0.36845445
Stack Test Date: 02/06/1991				
Emission Comment: 1991 Stack Test				
121142 - 2,4-Dinitrotoluene			10_0 - OK DEQ Approved Method (no EF)	0.003826
Emission Comment: HAPS and Toxics are calculated using EPRI TRI for Power Plants Software				
75070 - Acetaldehyde			10_0 - OK DEQ Approved Method (no EF)	0.004251
Emission Comment: HAPS and Toxics are calculated using EPRI TRI for Power Plants Software				
98862 - Acetophenone			10_0 - OK DEQ Approved Method (no EF)	0.002834
Emission Comment: HAPS and Toxics are calculated using EPRI TRI for Power Plants Software				
107028 - Acrolein			10_0 - OK DEQ Approved Method (no EF)	0.0049595
Emission Comment: HAPS and Toxics are calculated using EPRI TRI for Power Plants Software				
107131 - Acrylonitrile			10_0 - OK DEQ Approved Method (no EF)	0.0155865
Emission Comment: HAPS and Toxics are calculated using EPRI TRI for Power Plants Software				
71432 - Benzene (including benzene from gasoline)			10_0 - OK DEQ Approved Method (no EF)	0.0029175
Emission Comment: HAPS and Toxics are calculated using EPRI TRI for Power Plants Software				
92875 - Benzidine			10_0 - OK DEQ Approved Method (no EF)	0.0039675
Emission Comment: HAPS and Toxics are calculated using EPRI TRI for Power Plants Software				
100447 - Benzyl chloride			10_0 - OK DEQ Approved Method (no EF)	0.002692

Emission Factor (Lbs/UOM) HAPS and Toxics are calculated using EPR TRI for Power Plants Software				
Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
117817 - Bis(2-ethylhexyl)phthalate (DEHP)			10_0 - OK DEQ Approved Method (no EF)	0.0034005
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPR TRI for Power Plants Software				
75150 - Carbon disulfide			10_0 - OK DEQ Approved Method (no EF)	0.002409
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPR TRI for Power Plants Software				
132649 - Dibenzofuran			10_0 - OK DEQ Approved Method (no EF)	0.0039675
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPR TRI for Power Plants Software				
84742 - Dibutylphthalate			10_0 - OK DEQ Approved Method (no EF)	0.0010345
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPR TRI for Power Plants Software				
131113 - Dimethyl phthalate			10_0 - OK DEQ Approved Method (no EF)	0.0012755
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPR TRI for Power Plants Software				
106934 - Ethylene dibromide (Dibromoethane)			10_0 - OK DEQ Approved Method (no EF)	0.0006945
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPR TRI for Power Plants Software				
50000 - Formaldehyde			10_0 - OK DEQ Approved Method (no EF)	0.0039535
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPR TRI for Power Plants Software				
110543 - Hexane			10_0 - OK DEQ Approved Method (no EF)	0.0031345
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPR TRI for Power Plants Software				
7647010 - Hydrochloric acid			10_0 - OK DEQ Approved Method (no EF)	0.304645
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPR TRI for Power Plants Software. A site specific emission factor of 215 lb/Tbtu based upon the average of all HCl test in 2021 was used in the software.				
7664393 - Hydrogen fluoride (Hydrofluoric acid)			10_0 - OK DEQ Approved Method (no EF)	0.030809
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPR TRI for Power Plants Software				
7439976 - Mercury			10_0 - OK DEQ Approved Method (no EF)	0.0012895
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPR TRI for Power Plants Software				
108101 - Methyl isobutyl ketone (Hexone)			10_0 - OK DEQ Approved Method (no EF)	0.012611
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPR TRI for Power Plants Software				
75092 - Methylene chloride (Dichloromethane)			10_0 - OK DEQ Approved Method (no EF)	0.026922
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPR TRI for Power Plants Software				
108952 - Phenol			10_0 - OK DEQ Approved Method (no EF)	0.002692
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPR TRI for Power Plants Software				
123386 - Propionaldehyde			10_0 - OK DEQ Approved Method (no EF)	0.007085
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPR TRI for Power Plants Software				
7664939 - Sulfuric acid (including acid mist expressed as H <sub>2</sub> SO <sub>4</sub> )			10_0 - OK DEQ Approved Method (no EF)	0.0141645
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPR TRI for Power Plants Software				
108883 - Toluene			10_0 - OK DEQ Approved Method (no EF)	0.0024025
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPR TRI for Power Plants Software				

Emission Unit ID	Unit Process ID	Throughput	Operations	
8315 Boiler 1A B-01A EUG-2	39172 Natural Gas - Boiler, >= 100 Million BTU/hr	<b>Annual Throughput:</b> 79,658.93 MILLION BTUS (Natural Gas) (Input)	Average Hours/Day: 20.6, Days/Week: 5.1, Weeks/Year: 30.0	
			Actual Hours/Year: 3,018.8	
			Seasonal Operations: Dec-Feb: 18.1%, Mar-May: 7.3%, Jun-Aug: 55.0%, Sep-Nov: 19.6%	
			<b>Comment:</b> Natural gas is used as a startup fuel and is co-fired with coal. Therefore, gas hours and coal hours are the same.	
Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide	84.0	EBFT3S - MILLION STANDARD CUBIC FEET	8_3 - US EPA Documents incl. AP-42 & WebFIRE (no Control EF)	3.28
<b>Overall Control Efficiency:</b> 0.0%				
NOX - Nitrogen Oxides (NO <sub>x</sub> ) expressed as NO <sub>2</sub>	140.0	EBFT3S - MILLION STANDARD CUBIC FEET	8_2 - US EPA Documents incl. AP-42 & WebFIRE (pre-Control EF)	5.47

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
PM10-FR - PM10 - Primary (Filterable + Condensable)	7.6	EBFT3S - MILLION STANDARD CUBIC FEET	8_2 - US EPA Documents incl. AP-42 & WebFIRE (pre-Control EF)	0.297
<b>Overall Control Efficiency: 99.0%</b>				
PM25-FR - PM2.5 - Primary (Filterable + Condensable)	7.6	EBFT3S - MILLION STANDARD CUBIC FEET	8_2 - US EPA Documents incl. AP-42 & WebFIRE (pre-Control EF)	0.297
<b>Overall Control Efficiency: 99.0%</b>				
SO2 - Sulfur Oxides (SOx) expressed as SO2	0.6	EBFT3S - MILLION STANDARD CUBIC FEET	8_2 - US EPA Documents incl. AP-42 & WebFIRE (pre-Control EF)	0.0234
<b>Overall Control Efficiency: 99.922%</b>				
VOC - Volatile Organic Compounds (VOCs)	5.5	EBFT3S - MILLION STANDARD CUBIC FEET	8_3 - US EPA Documents incl. AP-42 & WebFIRE (no Control EF)	0.215
<b>Overall Control Efficiency: 0.0%</b>				

Emission Unit ID	Unit Process ID	Throughput	Operations	
8316 Boiler 1B B-02-01B EUG-2	39173 Subbituminous Coal - Boiler, Atmospheric Fluidized Bed Combustion: Circulating Bed	<b>Annual Throughput:</b> 130,136.62 TONS (Coal) (Input)		Average Hours/Day: 20.7, Days/Week: 4.8, Weeks/Year: 33.0 Actual Hours/Year: 3,193.7 Seasonal Operations: Dec-Feb: 23.4%, Mar-May: 8.6%, Jun-Aug: 45.8%, Sep-Nov: 22.2%
Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide	2.7711	TON - TONS	4_0 - Stack Test - US EPA Reference Method (no Control EF)	180.310793841
<b>Stack Test Date:</b> 02/06/1991				
<b>Emission Comment:</b> 1991 Stack Test				
NOX - Nitrogen Oxides (NOx) expressed as NO2			1_0 - Continuous Emission Monitoring System (CEMS)	281.8730038
<b>Emission Comment:</b> Emissions are measured by the Part 75 CEMS on the common stack. To get emissions per boiler, emissions are scaled by their per boiler Part 60 emissions.				
PM10-FR - PM10 - Primary (Filterable + Condensable)	0.04	EBBTU - MILLION BTUS	4_2 - Stack Test - US EPA Reference Method (pre-Control EF)	46.277
<b>Stack Test Date:</b> 02/06/1991				
<b>Overall Control Efficiency:</b> 99.0%				
<b>Emission Comment:</b> 1991 Stack Test				
PM25-FR - PM2.5 - Primary (Filterable + Condensable)	0.022	EBBTU - MILLION BTUS	4_0 - Stack Test - US EPA Reference Method (no Control EF)	25.453
<b>Stack Test Date:</b> 02/06/1991				
<b>Emission Comment:</b> 1991 Stack Test				
SO2 - Sulfur Oxides (SOx) expressed as SO2			1_0 - Continuous Emission Monitoring System (CEMS)	146.1079274
<b>Emission Comment:</b> Emissions are measured by the Part 75 CEMS on the common stack. To get emissions per boiler, emissions are scaled by their per boiler Part 60 emissions.				
VOC - Volatile Organic Compounds (VOCs)	0.006	TON - TONS	4_0 - Stack Test - US EPA Reference Method (no Control EF)	0.39040986
<b>Stack Test Date:</b> 02/06/1991				
<b>Emission Comment:</b> 1991 Stack Test				
121142 - 2,4-Dinitrotoluene			10_0 - OK DEQ Approved Method (no EF)	0.0040565
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPA TRI for Power Plants Software				
75070 - Acetaldehyde			10_0 - OK DEQ Approved Method (no EF)	0.004507
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPA TRI for Power Plants Software				

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
98862 - Acetophenone			10_0 - OK DEQ Approved Method (no EF)	0.003005
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
107028 - Acrolein			10_0 - OK DEQ Approved Method (no EF)	0.0052585
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
107131 - Acrylonitrile			10_0 - OK DEQ Approved Method (no EF)	0.0165265
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
71432 - Benzene (including benzene from gasoline)			10_0 - OK DEQ Approved Method (no EF)	0.0030785
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
92875 - Benzidine			10_0 - OK DEQ Approved Method (no EF)	0.0042065
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
100447 - Benzyl chloride			10_0 - OK DEQ Approved Method (no EF)	0.0028545
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
117817 - Bis(2-ethylhexyl)phthalate (DEHP)			10_0 - OK DEQ Approved Method (no EF)	0.003606
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
75150 - Carbon disulfide			10_0 - OK DEQ Approved Method (no EF)	0.002554
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
132649 - Dibenzofuran			10_0 - OK DEQ Approved Method (no EF)	0.0042065
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
84742 - Dibutylphthalate			10_0 - OK DEQ Approved Method (no EF)	0.001097
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
131113 - Dimethyl phthalate			10_0 - OK DEQ Approved Method (no EF)	0.001352
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
106934 - Ethylene dibromide (Dibromoethane)			10_0 - OK DEQ Approved Method (no EF)	0.000736
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
50000 - Formaldehyde			10_0 - OK DEQ Approved Method (no EF)	0.003592
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
110543 - Hexane			10_0 - OK DEQ Approved Method (no EF)	0.0033205
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
7647010 - Hydrochloric acid			10_0 - OK DEQ Approved Method (no EF)	0.3224345
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software. A site specific emission factor of 215 lb/Tbtu based upon the average of all HCl test in 2021 was used in the software.			
7664393 - Hydrogen fluoride (Hydrofluoric acid)			10_0 - OK DEQ Approved Method (no EF)	0.037189
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
7439976 - Mercury			10_0 - OK DEQ Approved Method (no EF)	0.001365
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
108101 - Methyl isobutyl ketone (Hexone)			10_0 - OK DEQ Approved Method (no EF)	0.0133715
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
75092 - Methylene chloride (Dichloromethane)			10_0 - OK DEQ Approved Method (no EF)	0.028546
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
108952 - Phenol			10_0 - OK DEQ Approved Method (no EF)	0.0028545
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
123386 - Propionaldehyde			10_0 - OK DEQ Approved Method (no EF)	0.007512
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
7664939 - Sulfuric acid (including acid mist expressed as H2SO4)			10_0 - OK DEQ Approved Method (no EF)	0.018019
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
108883 - Toluene			10_0 - OK DEQ Approved Method (no EF)	0.0025235



		Emission Comment: HAPs and Toxics are calculated using EPR TRM for Power Plant Software				Estimated Emis. (Tons)
Emission Unit ID	Unit Process ID	Pollutant Throughput	Operations			
8316 Boiler 1B B-02-01B EUG-2	39174 Natural Gas - Boiler, >= 100 Million BTU/hr	Annual Throughput: 70,344.41 MILLION BTUS (Natural Gas) (Input)			Average Hours/Day: 20.7, Days/Week: 4.8, Weeks/Year: 33.0 Actual Hours/Year: 3,193.7 Seasonal Operations: Dec-Feb: 23.4%, Mar-May: 8.6%, Jun-Aug: 45.8%, Sep-Nov: 22.2%	
		Comment: Natural gas is used as a startup fuel and is co-fired with coal. Therefore, gas hours and coal hours are the same.				
		Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
		CO - Carbon Monoxide	84.0	EBFT3S - MILLION STANDARD CUBIC FEET	8_3 - US EPA Documents incl. AP-42 & WebFIRE (no Control EF)	2.9
		Overall Control Efficiency: 0.0%				
		NOX - Nitrogen Oxides (NOx) expressed as NO2	140.0	EBFT3S - MILLION STANDARD CUBIC FEET	8_2 - US EPA Documents incl. AP-42 & WebFIRE (pre-Control EF)	4.86
		Overall Control Efficiency: 99.0%				
		PM10-FR - PM 10 - Primary (Filterable + Condensible)	7.6	EBFT3S - MILLION STANDARD CUBIC FEET	8_2 - US EPA Documents incl. AP-42 & WebFIRE (pre-Control EF)	0.262
		Overall Control Efficiency: 99.0%				
		PM25-FR - PM 2.5 - Primary (Filterable + Condensible)	7.6	EBFT3S - MILLION STANDARD CUBIC FEET	8_2 - US EPA Documents incl. AP-42 & WebFIRE (pre-Control EF)	0.262
		Overall Control Efficiency: 99.0%				
		SO2 - Sulfur Oxides (SOx) expressed as SO2	0.6	EBFT3S - MILLION STANDARD CUBIC FEET	8_2 - US EPA Documents incl. AP-42 & WebFIRE (pre-Control EF)	0.021
		Overall Control Efficiency: 99.922%				
		VOC - Volatile Organic Compounds (VOCs)	5.5	EBFT3S - MILLION STANDARD CUBIC FEET	8_3 - US EPA Documents incl. AP-42 & WebFIRE (no Control EF)	0.19
		Overall Control Efficiency: 0.0%				
Emission Unit ID	Unit Process ID	Throughput			Operations	
8317 Boiler 2A B-02-02A EUG-2	39175 Subbituminous Coal - Boiler, Atmospheric Fluidized Bed Combustion: Circulating Bed	Annual Throughput: 228,443.5 TONS (Coal) (Input)			Average Hours/Day: 22.0, Days/Week: 5.8, Weeks/Year: 44.0 Actual Hours/Year: 5,340.4 Seasonal Operations: Dec-Feb: 20.7%, Mar-May: 27.7%, Jun-Aug: 31.1%, Sep-Nov: 20.5%	
		Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
		CO - Carbon Monoxide	2.7711	TON - TONS	4_0 - Stack Test - US EPA Reference Method (no Control EF)	316.519891425
		Stack Test Date: 02/06/1991				
		Emission Comment: 1991 Stack Test				
		NOX - Nitrogen Oxides (NOx) expressed as NO2			1_0 - Continuous Emission Monitoring System (CEMS)	511.2323532
		Emission Comment: Emissions are measure by the Part 75 CEMS on the common stack. To get emissions per boiler, emissions are scaled by their per boiler Part 60 emissions.				
		PM10-FR - PM 10 - Primary (Filterable + Condensible)	0.02	EBBTU - MILLION BTUS	4_2 - Stack Test - US EPA Reference Method (pre-Control EF)	42.717
		Stack Test Date: 02/06/1991				
		Overall Control Efficiency: 99.0%				
		Emission Comment: 1991 Stack Test				
		PM25-FR - PM 2.5 - Primary (Filterable + Condensible)	0.012	EBBTU - MILLION BTUS	4_0 - Stack Test - US EPA Reference Method (no Control EF)	25.63
		Stack Test Date: 02/06/1991				
		Emission Comment: 1991 Stack Test				

Pollutant	Emiss. Factor (Lbs/UOM)	Emiss. Factor UOM	Calculation Method	Estimated Emiss. (Tons)
SO2 - Sulfur Oxides (SOx) expressed as SO2			1_0 - Continuous Emission Monitoring System (CEMS)	182.043173
	<b>Emission Comment:</b> Emissions are measured by the Part 75 CEMS on the common stack. To get emissions per boiler, emissions are scaled by their per boiler Part 60 emissions.			
VOC - Volatile Organic Compounds (VOCs)	0.006	TON - TONS	4_0 - Stack Test - US EPA Reference Method (no Control EF)	0.6853305
	<b>Stack Test Date:</b> 02/06/1991			
	<b>Emission Comment:</b> 1991 Stack Test			
121142 - 2,4-Dinitrotoluene			10_0 - OK DEQ Approved Method (no EF)	0.007133
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
75070 - Acetaldehyde			10_0 - OK DEQ Approved Method (no EF)	0.007926
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
98862 - Acetophenone			10_0 - OK DEQ Approved Method (no EF)	0.005284
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
107028 - Acrolein			10_0 - OK DEQ Approved Method (no EF)	0.0092465
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
107131 - Acrylonitrile			10_0 - OK DEQ Approved Method (no EF)	0.029061
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
71432 - Benzene (including benzene from gasoline)			10_0 - OK DEQ Approved Method (no EF)	0.0053545
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
92875 - Benzidine			10_0 - OK DEQ Approved Method (no EF)	0.0073975
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
100447 - Benzyl chloride			10_0 - OK DEQ Approved Method (no EF)	0.0050195
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
117817 - Bis(2-ethylhexyl)phthalate (DEHP)			10_0 - OK DEQ Approved Method (no EF)	0.0063405
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
75150 - Carbon disulfide			10_0 - OK DEQ Approved Method (no EF)	0.0044915
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
132649 - Dibenzofuran			10_0 - OK DEQ Approved Method (no EF)	0.0073975
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
84742 - Dibutylphthalate			10_0 - OK DEQ Approved Method (no EF)	0.0019285
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
131113 - Dimethyl phthalate			10_0 - OK DEQ Approved Method (no EF)	0.0023775
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
106934 - Ethylene dibromide (Dibromoethane)			10_0 - OK DEQ Approved Method (no EF)	0.0012945
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
50000 - Formaldehyde			10_0 - OK DEQ Approved Method (no EF)	0.0039105
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
110543 - Hexane			10_0 - OK DEQ Approved Method (no EF)	0.005827
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
7647010 - Hydrochloric acid			10_0 - OK DEQ Approved Method (no EF)	0.56743
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software. A site specific emission factor of 215 lb/Tbtu based upon the average of all HCl test in 2021 was used in the software.			
7664393 - Hydrogen fluoride (Hydrofluoric acid)			10_0 - OK DEQ Approved Method (no EF)	0.1925065
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
7439976 - Mercury			10_0 - OK DEQ Approved Method (no EF)	0.0024015
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
108101 - Methyl isobutyl ketone (Hexone)			10_0 - OK DEQ Approved Method (no EF)	0.023513
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software				
75092 - Methylene chloride (Dichloromethane)			10_0 - OK DEQ Approved Method (no EF)	0.0501965
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software				
108952 - Phenol			10_0 - OK DEQ Approved Method (no EF)	0.0050195
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software				
123386 - Propionaldehyde			10_0 - OK DEQ Approved Method (no EF)	0.0132095
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software				
7664939 - Sulfuric acid (including acid mist expressed as H <sub>2</sub> SO <sub>4</sub> )			10_0 - OK DEQ Approved Method (no EF)	0.021004
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software				
108883 - Toluene			10_0 - OK DEQ Approved Method (no EF)	0.004341
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software				

Emission Unit ID	Unit Process ID	Throughput	Operations			
8317 Boiler 2A B-02-02A EUG-2	39176 Natural Gas - Boiler, ≥ 100 Million BTU/hr	Annual Throughput: 67,121.77 MILLION BTUS (Natural Gas) (Input)	Average Hours/Day: 22.0, Days/Week: 5.8, Weeks/Year: 44.0 Actual Hours/Year: 5,340.4 Seasonal Operations: Dec-Feb: 20.7%, Mar-May: 27.7%, Jun-Aug: 31.1%, Sep-Nov: 20.5%			
			Comment: Natural gas is used as a startup fuel and is co-fired with coal. Therefore, gas hours and coal hours are the same.			
			Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method
		CO - Carbon Monoxide	84.0	EBFT3S - MILLION STANDARD CUBIC FEET	8_3 - US EPA Documents incl. AP-42 & WebFIRE (no Control EF)	2.76
		Overall Control Efficiency: 0.0%				
		NOX - Nitrogen Oxides (NOx) expressed as NO2	140.0	EBFT3S - MILLION STANDARD CUBIC FEET	8_2 - US EPA Documents incl. AP-42 & WebFIRE (pre-Control EF)	4.61
		Overall Control Efficiency: 99.0%				
		PM10-FRI - PM10 - Primary (Filterable + Condensible)	7.6	EBFT3S - MILLION STANDARD CUBIC FEET	8_2 - US EPA Documents incl. AP-42 & WebFIRE (pre-Control EF)	0.25
		Overall Control Efficiency: 99.0%				
		PM25-FRI - PM2.5 - Primary (Filterable + Condensible)	7.6	EBFT3S - MILLION STANDARD CUBIC FEET	8_2 - US EPA Documents incl. AP-42 & WebFIRE (pre-Control EF)	0.25
		Overall Control Efficiency: 99.0%				
		SO2 - Sulfur Oxides (SOx) expressed as SO2	0.6	EBFT3S - MILLION STANDARD CUBIC FEET	8_2 - US EPA Documents incl. AP-42 & WebFIRE (pre-Control EF)	0.02
		Overall Control Efficiency: 99.922%				
		VOC - Volatile Organic Compounds (VOCs)	5.5	EBFT3S - MILLION STANDARD CUBIC FEET	8_3 - US EPA Documents incl. AP-42 & WebFIRE (no Control EF)	0.181
		Overall Control Efficiency: 0.0%				

Emission Unit ID	Unit Process ID	Throughput	Operations					
8318 Boiler 2B B-02-02B EUG-2	39177 Subbituminous Coal - Boiler, Atmospheric Fluidized Bed Combustion: Circulating Bed	Annual Throughput: 229,662.51 TONS (Coal) (Input)	Average Hours/Day: 22.2, Days/Week: 6.0, Weeks/Year: 41.0 Actual Hours/Year: 5,283.9 Seasonal Operations: Dec-Feb: 17.2%, Mar-May: 27.5%, Jun-Aug: 39.0%, Sep-Nov: 16.3%					
			Pollutant		Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
			CO - Carbon Monoxide		2.7711	TON - TONS	4_0 - Stack Test - US EPA Reference Method (no Control EF)	318.2088907305
			Stack Test Date: 02/06/1991					

Pollutant	Emission Factor (lb/1000 Btu) UOM	Emission Factor UOM	Calculation Method	Estimated Emis. (Tons)
NOx - Nitrogen Oxides (NOx) expressed as NO2			1_0 - Continuous Emission Monitoring System (CEMS)	449.2606057
	<b>Emission Comment:</b> Emissions are measure by the Part 75 CEMS on the common stack. To get emissions per boiler, emissions are scaled by their per boiler Part 60 emissions.			
PM10-FR - PM10 - Primary (Filterable + Condensable)	0.01	EBBTU - MILLION BTUS	4_2 - Stack Test - US EPA Reference Method (pre-Control EF)	21.182
	<b>Stack Test Date:</b> 02/06/1991			
	<b>Overall Control Efficiency:</b> 99.0%			
	<b>Emission Comment:</b> 1991 Stack Test			
PM25-FR - PM2.5 - Primary (Filterable + Condensable)	0.008	EBBTU - MILLION BTUS	4_0 - Stack Test - US EPA Reference Method (no Control EF)	12.709
	<b>Stack Test Date:</b> 02/06/1991			
	<b>Emission Comment:</b> 1991 Stack Test			
SO2 - Sulfur Oxides (SOx) expressed as SO2			1_0 - Continuous Emission Monitoring System (CEMS)	172.6308322
	<b>Emission Comment:</b> Emissions are measure by the Part 75 CEMS on the common stack. To get emissions per boiler, emissions are scaled by their per boiler Part 60 emissions.			
VOC - Volatile Organic Compounds (VOCs)	0.006	TON - TONS	4_0 - Stack Test - US EPA Reference Method (no Control EF)	0.68898753
	<b>Stack Test Date:</b> 02/06/1991			
	<b>Emission Comment:</b> 1991 Stack Test			
121142 - 2,4-Dinitrotoluene			10_0 - OK DEQ Approved Method (no EF)	0.007171
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
75070 - Acetaldehyde			10_0 - OK DEQ Approved Method (no EF)	0.007968
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
98862 - Acetophenone			10_0 - OK DEQ Approved Method (no EF)	0.005312
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
107028 - Acrolein			10_0 - OK DEQ Approved Method (no EF)	0.009296
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
107131 - Acrylonitrile			10_0 - OK DEQ Approved Method (no EF)	0.029216
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
71432 - Benzene (including benzene from gasoline)			10_0 - OK DEQ Approved Method (no EF)	0.0053745
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
92875 - Benzidine			10_0 - OK DEQ Approved Method (no EF)	0.007437
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
100447 - Benzyl chloride			10_0 - OK DEQ Approved Method (no EF)	0.0050465
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
117817 - Bis(2-ethylhexyl)phthalate (DEHP)			10_0 - OK DEQ Approved Method (no EF)	0.0063745
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
75150 - Carbon disulfide			10_0 - OK DEQ Approved Method (no EF)	0.004515
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
132649 - Dibenzofuran			10_0 - OK DEQ Approved Method (no EF)	0.007437
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
84742 - Dibutylphthalate			10_0 - OK DEQ Approved Method (no EF)	0.001939
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
131113 - Dimethyl phthalate			10_0 - OK DEQ Approved Method (no EF)	0.0023905
	<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software			
106934 - Ethylene dibromide (Dibromoethane)			10_0 - OK DEQ Approved Method (no EF)	0.0013015

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
50000 - Formaldehyde			10_0 - OK DEQ Approved Method (no EF)	0.003602
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software				
110543 - Hexane			10_0 - OK DEQ Approved Method (no EF)	0.005856
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software				
7647010 - Hydrochloric acid			10_0 - OK DEQ Approved Method (no EF)	0.57046
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software. A site specific emission factor of 215 lb/Tbtu based upon the average of all HQ test in 2021 was used in the software.				
7664393 - Hydrogen fluoride (Hydrofluoric acid)			10_0 - OK DEQ Approved Method (no EF)	0.209191
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software				
7439976 - Mercury			10_0 - OK DEQ Approved Method (no EF)	0.0024145
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software				
108101 - Methyl isobutyl ketone (Hexone)			10_0 - OK DEQ Approved Method (no EF)	0.0236385
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software				
75092 - Methylene chloride (Dichloromethane)			10_0 - OK DEQ Approved Method (no EF)	0.050464
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software				
108952 - Phenol			10_0 - OK DEQ Approved Method (no EF)	0.0050465
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software				
123386 - Propionaldehyde			10_0 - OK DEQ Approved Method (no EF)	0.01328
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software				
7664939 - Sulfuric acid (including acid mist expressed as H <sub>2</sub> SO <sub>4</sub> )			10_0 - OK DEQ Approved Method (no EF)	0.019908
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software				
108883 - Toluene			10_0 - OK DEQ Approved Method (no EF)	0.004351
<b>Emission Comment:</b> HAPS and Toxics are calculated using EPRI TRI for Power Plants Software				

Emission Unit ID	Unit Process ID	Throughput	Operations			
8318 Boiler 2B B-02-02B EUG-2	39178 Natural Gas - Boiler, >= 100 Million BTU/hr	Annual Throughput: 59,726.01 MILLION BTUS (Natural Gas) (Input)	Average Hours/Day: 22.2, Days/Week: 6.0, Weeks/Year: 41.0			
			Actual Hours/Year: 5,283.9			
			Seasonal Operations: Dec-Feb: 17.2%, Mar-May: 27.5%, Jun-Aug: 39.0%, Sep-Nov: 16.3%			
		Comment: Natural gas is used as a startup fuel and is co-fired with coal. Therefore, gas hours and coal hours are the same.				
		Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
		CO - Carbon Monoxide	84.0	EBFT3S - MILLION STANDARD CUBIC FEET	8_3 - US EPA Documents incl. AP-42 & WebFIRE (no Control EF)	2.46
		Overall Control Efficiency: 0.0%				
		NOX - Nitrogen Oxides (NOx) expressed as NO2	140.0	EBFT3S - MILLION STANDARD CUBIC FEET	8_2 - US EPA Documents incl. AP-42 & WebFIRE (pre-Control EF)	4.1
		Overall Control Efficiency: 99.0%				
		PM10-FRI - PM 10 - Primary (Filterable + Condensible)	7.6	EBFT3S - MILLION STANDARD CUBIC FEET	8_2 - US EPA Documents incl. AP-42 & WebFIRE (pre-Control EF)	0.223
Overall Control Efficiency: 99.0%						
PM25-FRI - PM2.5 - Primary (Filterable + Condensible)	7.6	EBFT3S - MILLION STANDARD CUBIC FEET	8_2 - US EPA Documents incl. AP-42 & WebFIRE (pre-Control EF)	0.223		
Overall Control Efficiency: 99.0%						
SO2 - Sulfur Oxides (SOx) expressed as SO2	0.6	EBFT3S - MILLION STANDARD CUBIC FEET	8_2 - US EPA Documents incl. AP-42 & WebFIRE (pre-Control EF)	0.018		
Overall Control Efficiency: 99.922%						
VOC - Volatile Organic Compounds (VOCs)	5.5	EBFT3S - MILLION STANDARD CUBIC FEET	8_3 - US EPA Documents incl. AP-42 & WebFIRE (no Control EF)	0.161		
Overall Control Efficiency: 0.0%						

Emission Unit ID	Unit Process ID	Throughput	Operations			
8320 Vehicle Traffic EUG-7	39180 Stone Quarrying - Processing (See also 305320) - Hauling	Annual Throughput: 26,139.0 MILES (Vehicle) (Input)		Average Hours/Day: 24.0, Days/Week: 7.0, Weeks/Year: 52.0 Actual Hours/Year: 8,760.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%		
		Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
		PM10-FR1 - PM 10 - Primary (Filterable + Condensible)			10_0 - OK DEQ Approved Method (no EF)	3.2
		PM25-FR1 - PM2.5 - Primary (Filterable + Condensible)			10_0 - OK DEQ Approved Method (no EF)	0.32
Emission Unit ID	Unit Process ID	Throughput	Operations			
8321 Coal handling EUG-6	39181 Coal Mning, Cleaning, and Material Handling - Coal Transfer	Annual Throughput: 711,060.78 TONS (Coal) (Input)		Average Hours/Day: 14.7, Days/Week: 7.0, Weeks/Year: 52.0 Actual Hours/Year: 5,340.4 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%		
		Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
		PM10-FR1 - PM 10 - Primary (Filterable + Condensible)			10_0 - OK DEQ Approved Method (no EF)	0.5792
		PM25-FR1 - PM2.5 - Primary (Filterable + Condensible)			10_0 - OK DEQ Approved Method (no EF)	0.0716
Emission Unit ID	Unit Process ID	Throughput	Operations			
8322 Limestone handling EUG-5	39182 Bulk Materials Conveyors - Limestone	Annual Throughput: 34,014.48 TONS (Limestone) (Input)		Average Hours/Day: 14.7, Days/Week: 7.0, Weeks/Year: 52.0 Actual Hours/Year: 5,340.4 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%		
		Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
		PM10-FR1 - PM 10 - Primary (Filterable + Condensible)	0.03	TON - TONS	8_2 - US EPA Documents incl. AP-42 & WebFIRE (pre-Control EF)	0.5102172
		Overall Control Efficiency: 0.0%				
		PM25-FR1 - PM2.5 - Primary (Filterable + Condensible)	0.0111	TON - TONS	8_3 - US EPA Documents incl. AP-42 & WebFIRE (no Control EF)	0.188780364
		Overall Control Efficiency: 0.0%				
Emission Unit ID	Unit Process ID	Throughput	Operations			
8323 Ash handling EUG-4	39183 Bulk Materials Conveyors - Other Not Classified	Annual Throughput: 66,495.8 TONS (Ash) (Input)		Average Hours/Day: 24.0, Days/Week: 7.0, Weeks/Year: 52.0 Actual Hours/Year: 8,760.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%		
		Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
		PM10-FR1 - PM 10 - Primary (Filterable + Condensible)			10_0 - OK DEQ Approved Method (no EF)	0.841
		PM25-FR1 - PM2.5 - Primary (Filterable + Condensible)			10_0 - OK DEQ Approved Method (no EF)	0.1274
Emission Unit ID	Unit Process ID	Throughput	Operations			
8325 Storage piles EUG-8	39185 Bulk Materials Storage Bins - Coal	Annual Throughput: 531,124.88 TONS (Coal Storage Area) (Existing)		Average Hours/Day: 24.0, Days/Week: 7.0, Weeks/Year: 52.0 Actual Hours/Year: 8,760.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%		
		Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
		PM10-FR1 - PM 10 - Primary (Filterable + Condensible)			10_0 - OK DEQ Approved Method (no EF)	2.9748
		PM25-FR1 - PM2.5 - Primary (Filterable + Condensible)			10_0 - OK DEQ Approved Method (no EF)	1.1899
Emission Unit ID	Unit Process ID	Throughput	Operations			
36186 Cooling Towers EUG-10	142967 Process Cooling - Mechanical Draft	Annual Throughput: 43,324.8 MILLION GALLONS (Cooling Water) (Input)	Average Hours/Day: 14.7, Days/Week: 7.0, Weeks/Year: 52.0 Actual Hours/Year: 5,340.4 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%			

		Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
		PM10-FR1 - PM10 - Primary (Filterable + Condensable)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	10.1777
		PM25-FR1 - PM2.5 - Primary (Filterable + Condensable)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	8.4475
Emission Unit ID	Unit Process ID	Throughput			Operations	
161174 ENG-1 1,180-hp Cummins KTA-38-G Emergency Diesel Power Generator	284777 Distillate Oil (Diesel) - Reciprocating: Exhaust	Annual Throughput: 12,980.0 HORSEPOWER-HOURS (Distillate Oil (Diesel)) (Input)			Average Hours/Day: 1.1, Days/Week: 0.4, Weeks/Year: 26.0 Actual Hours/Year: 11.0 Seasonal Operations: Dec-Feb: 13.6%, Mar-May: 31.8%, Jun-Aug: 32.7%, Sep-Nov: 21.8%	
		Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
		CO - Carbon Monoxide	0.00668	HP-HR - HORSEPOWER-HOURS	8_3 - US EPA Documents incl. AP-42 & WebFIRE (no Control EF)	0.0433532
		Overall Control Efficiency: 0.0%				
		NOX - Nitrogen Oxides (NOx) expressed as NO2	0.031	HP-HR - HORSEPOWER-HOURS	8_3 - US EPA Documents incl. AP-42 & WebFIRE (no Control EF)	0.20119
		Overall Control Efficiency: 0.0%				
		PM10-FR1 - PM10 - Primary (Filterable + Condensable)	0.0022	HP-HR - HORSEPOWER-HOURS	8_3 - US EPA Documents incl. AP-42 & WebFIRE (no Control EF)	0.014278
		Overall Control Efficiency: 0.0%				
		SO2 - Sulfur Oxides (SOx) expressed as SO2	0.00205	HP-HR - HORSEPOWER-HOURS	8_3 - US EPA Documents incl. AP-42 & WebFIRE (no Control EF)	0.0133045
		Overall Control Efficiency: 0.0%				
		VOC - Volatile Organic Compounds (VOCs)	0.00251	HP-HR - HORSEPOWER-HOURS	8_3 - US EPA Documents incl. AP-42 & WebFIRE (no Control EF)	0.0162899
		Overall Control Efficiency: 0.0%				
Emission Unit ID	Unit Process ID	Throughput			Operations	
161271 ENG-2 890-hp Caterpillar 3412 Emergency Boiler Feedwater Pump	284857 Distillate Oil (Diesel) - Reciprocating: Exhaust	Annual Throughput: 1,958.0 HORSEPOWER-HOURS (Distillate Oil (Diesel)) (Input)			Average Hours/Day: 0.2, Days/Week: 0.4, Weeks/Year: 26.0 Actual Hours/Year: 2.2 Seasonal Operations: Dec-Feb: 45.5%, Mar-May: 0.0%, Jun-Aug: 0.0%, Sep-Nov: 54.5%	
		Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
		CO - Carbon Monoxide	0.00668	HP-HR - HORSEPOWER-HOURS	8_3 - US EPA Documents incl. AP-42 & WebFIRE (no Control EF)	0.00653972
		Overall Control Efficiency: 0.0%				
		NOX - Nitrogen Oxides (NOx) expressed as NO2	0.031	HP-HR - HORSEPOWER-HOURS	8_3 - US EPA Documents incl. AP-42 & WebFIRE (no Control EF)	0.030349
		Overall Control Efficiency: 0.0%				
		PM10-FR1 - PM10 - Primary (Filterable + Condensable)	0.0022	HP-HR - HORSEPOWER-HOURS	8_3 - US EPA Documents incl. AP-42 & WebFIRE (no Control EF)	0.0021538
		Overall Control Efficiency: 0.0%				
		SO2 - Sulfur Oxides (SOx) expressed as SO2	0.00205	HP-HR - HORSEPOWER-HOURS	8_3 - US EPA Documents incl. AP-42 & WebFIRE (no Control EF)	0.00200695
		Overall Control Efficiency: 0.0%				
		VOC - Volatile Organic Compounds (VOCs)	0.00251	HP-HR - HORSEPOWER-HOURS	8_3 - US EPA Documents incl. AP-42 & WebFIRE (no Control EF)	0.00245729
		Overall Control Efficiency: 0.0%				

Emission Unit ID	Unit Process ID	Throughput	Operations			
161286 ENG-3 420-hp Caterpillar 3406B DI Diesel Firewater Pump	285150 Distillate Oil (Diesel) - Reciprocating	Annual Throughput: 4,620.0 HORSEPOWER-HOURS (Distillate Oil (No. 2)) (Input)	Average Hours/Day: 0.4, Days/Week: 0.4, Weeks/Year: 26.0 Actual Hours/Year: 4.0  Seasonal Operations: Dec-Feb: 0.0%, Mar-May: 67.5%, Jun-Aug: 15.0%, Sep-Nov: 17.5%			
		Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
		CO - Carbon Monoxide	0.0068	HP-HR - HORSEPOWER-HOURS	8_3 - US EPA Documents incl. AP-42 & WebFIRE (no Control EF)	0.015708
		Overall Control Efficiency: 0.0%				
		NOX - Nitrogen Oxides (NOx) expressed as NO2	0.031	HP-HR - HORSEPOWER-HOURS	8_3 - US EPA Documents incl. AP-42 & WebFIRE (no Control EF)	0.07161
		Overall Control Efficiency: 0.0%				
		PM10-FR - PM10 - Primary (Filterable + Condensible)	0.0022	HP-HR - HORSEPOWER-HOURS	8_3 - US EPA Documents incl. AP-42 & WebFIRE (no Control EF)	0.005082
		Overall Control Efficiency: 0.0%				
		SO2 - Sulfur Oxides (SOx) expressed as SO2	0.00205	HP-HR - HORSEPOWER-HOURS	8_3 - US EPA Documents incl. AP-42 & WebFIRE (no Control EF)	0.0047355
		Overall Control Efficiency: 0.0%				
		VOC - Volatile Organic Compounds (VOCs)	0.00251	HP-HR - HORSEPOWER-HOURS	8_3 - US EPA Documents incl. AP-42 & WebFIRE (no Control EF)	0.0057981
		Overall Control Efficiency: 0.0%				